

MINERAL INDUSTRY SURVEYS

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Zinc, Monthly

ZINC IN JULY 1996

Domestic mine production, expressed as recoverable zinc, increased by more than 6%, from 49,900 tons in June to 53,000 tons in July 1996, a 3,700-ton increase over July 1995. The monthly increase in smelter production was much lower, only about 1% higher than the previous month, but 3% higher than in July 1995. Apparent consumption in July 1996 was 93,300 tons, slightly less than in June and 4.4% lower than consumption in July 1995.

The *Platt's Metals Week* composite price for North American Special Grade zinc in July was 49.87 cents per pound, slightly higher than the previous month's price and nearly 5% lower than in July 1995.

The premiums for special high-grade zinc added to London Metal Exchange base prices inched upward, and by the end of July reached about 5.5 cents per pound. The last contracts awarded by the U.S. Mint carried an average premium of 5.8 cents per pound. Last year, the premiums were 8 to 10 cents per pound, causing increased imports and generating a surplus of zinc metal, which forced producers to cut premiums. As the surplus began to be drawn down, the zinc market tightened and premiums began to increase, reaching their highest point in July 1996.¹

Crandon Mining Co., a 50-50 joint venture between Rio Algom and Exxon Minerals, is awaiting approval for its Rhinelander copper-lead-zinc mine in Wisconsin. The mine, which is expected to come on-stream by 1998, is forecast to produce up to 300 tons of zinc concentrate annually.² Recoverable ore reserves amount to 30 million tons grading 9.4% zinc and 0.4% copper.

Metal Recovery of East Chicago, Indiana, is to acquire the exclusive rights for a patented process to recover zinc from the caustic solution used for degalvanizing steel scrap. A 99% rate of recovery, in

the form of 99.8% pure zinc powder, was achieved at its East Chicago plant, where the new process was tested. The company planned to recover zinc from 75,000 tons of galvanized scrap per year.³

Discovery of 1.3 million tons of ore reserves will enable Canadian Metal Mining Corp. to continue production at its 100% owned Winston Lake zinc-copper mine in Ontario for an additional 7 years. Annual production capacity now stands at 365,000 tons of ore, with proven and probable reserves grading 15.5% zinc and 0.91% copper.⁴

In Australia negotiations between Century Zinc Ltd. and the Aboriginal people apparently will continue after a recent vote of the United Gulf Region Aboriginal Group in favor of the project was declared illegal by local Aboriginal activists in Queensland. Because of its remoteness, only about 50 people live within a 100-kilometer radius of the deposit located in the Gulf of Carpentaria. The obstacle is the sacredness of four rivers which the slurry pipeline will have to cross from the site to the gulf port of Kurumba. The delay may negatively affect the fate of Pasminco's Budel smelter in the Netherlands, which has to find a large supply of low-iron zinc concentrates by July 1, 1998, or face closure.⁵

¹American Metal Market. Zinc producer premiums up. V. 104, No. 147, July 31, 1996.

²Metal Bulletin. Crandon Mining plans to develop Rhinelander deposit. No. 8096, July 15, 1996.

³Metal Bulletin. Metal Recovery gets dezincing process. No. 8092, July 1, 1996.

⁴Metal Bulletin. Inmet's Winston Lake gets new lease of life. No. 8096, July 15, 1996.

⁵American Metal Market. Study sees zinc smelter closing. V. 104, No. 128, July 2, 1996.

TABLE 1
SALIENT ZINC STATISTICS 1/

(Metric tons)

	1995 p/			1996			
	Jan.-July	July	Jan.-Dec.	May	June	July	Jan.-July
Production:							
Mine, recoverable zinc	351,000	49,300 r/	601,000	50,700	49,900 r/	53,000	350,000
Smelter, slab zinc	217,000	29,900 r/	363,000	30,500 r/	30,400 r/	30,800	213,000
Oxide, (gross weight)	74,400	10,700 r/	130,000	11,200 r/	10,300 r/	9,180	75,300
Consumption:							
Slab zinc, reported	384,000	44,000 r/	638,000	50,300 r/	50,600 r/	45,500	349,000
Ores e/ 2/	1,400	200	2,400	200	200	200	1,400
Zinc-base scrap e/ 2/	70,000	10,000	120,000	10,000	10,000	10,000	70,000
Copper-base scrap e/ 2/	77,000	11,000	132,000	11,000	11,000	11,000	77,000
Aluminum-and magnesium-base scrap e/ 2/	490	70	840	70	70	70	490
Total e/	533,000	65,300 r/	893,000	71,600 r/	71,900 r/	66,800	498,000
Apparent consumption, metal 3/	751,000	97,600 r/	1,240,000	109,000 r/	93,700 r/	93,300	674,000
Stocks of slab zinc, end of period:							
Producer 4/	XX	8,950 r/	XX	7,840 r/	8,110 r/	8,760	XX
Consumer 5/	XX	41,000	XX	40,200 r/	37,500 r/	39,700	XX
Merchant	XX	6,240	XX	3,050	1,980 r/	1,930	XX
Total	XX	56,200 r/	XX	51,100 r/	47,600 r/	50,400	XX
Imports for consumption:							
Slab zinc	530,000	61,100	856,000	74,100	57,200	NA	388,000 6/
Oxide	26,200	3,990	49,100	5,290	4,310	NA	29,300 6/
Ore and concentrate	9,500	793	10,300	13	522	NA	1,500 6/
Exports:							
Slab zinc	2,650	332	3,080	281	378	NA	918 6/
Waste and scrap (zinc content)	33,600	4,150	55,900	3,990	4,250	NA	26,900 6/
Ore and concentrate (zinc content)	165,000	123,000	424,000	3,080	3,920	NA	26,400 6/
Oxide	3,710	562	7,090	461	348	NA	3,160 6/
Price:							
Platt's Metals Week North American Special							
High Grade, average, cents per pound	54.22	52.44	55.83	50.50	49.57	49.87	50.44

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits, except prices; may not add to totals shown.

2/ Recoverable zinc content.

3/ Smelter production + imports - exports + beginning stocks - ending stocks.

4/ Includes stocks held at smelters and elsewhere by producers, as reported by ABMS, plus estimated additional data for smelters not reporting to ABMS.

5/ In addition to stocks reported by consumers on a monthly basis, about 10,000 tons was estimated to be held by companies reporting on an annual basis only.

6/ Includes data through June only. July data not available at time of publication.

TABLE 2
MINE PRODUCTION OF RECOVERABLE ZINC IN THE UNITED STATES 1/

(Metric tons)

State	1995 p/			1996			
	Jan. - July	July	Jan. - Dec.	May	June r/	July	Jan. - July
Missouri	28,400	3,410 r/	47,000	W	W	W	W
Other States 2/	322,000	45,900	554,000	50,700	49,900	53,000	350,000
Total	351,000	49,300 r/	601,000	50,700	49,900	53,000	350,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing proprietary data; included in "Other States."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes Alaska, Colorado, Idaho, Illinois, Montana, New York, and Tennessee, and State indicated by "W."

TABLE 3
ESTIMATED TOTAL PRODUCTION, SHIPMENTS, AND STOCKS OF SLAB ZINC 1/ AND ZINC OXIDE 2/, BY MONTH 3/

(Metric tons)

Month	Stocks at beginning of month		Production		Shipments		Stocks at end of month 4/	
	Slab Zinc	Zinc Oxide	Slab Zinc	Zinc Oxide	Slab Zinc	Zinc Oxide	Slab Zinc	Zinc Oxide
1995: p/								
Jan.-July	XX	XX	217,000	74,400	219,000	77,200	XX	XX
July	8,290	6,510	29,900	9,690	30,200	9,410	8,030	6,790
August	8,030	6,790	29,400	10,700	30,300	11,000	7,190	6,430
September	7,190	6,430	29,200	11,700	29,700	11,100	6,700	6,980
October	6,650	6,980	29,200	11,200	29,600	11,300	6,240	6,800
November	6,240	6,800	28,000	11,100	28,900	11,300	5,340	6,620
December	5,340	6,620	30,000	10,900	29,200	10,500	6,170	6,990
Total	XX	XX	363,000	130,000	368,000	132,000	XX	XX
1996:								
January	6,170	6,990	31,300	10,700	29,400	12,900	8,030	4,760
February	8,030	4,760	29,400	10,400	29,800	12,000	7,660	3,100
March	7,660	3,100	30,400	12,200	31,100	11,500	6,900	3,740
April	6,900	3,750	29,800	11,400	29,400	11,600	7,330	3,530
May	7,330	3,530	30,500 r/	11,200 r/	30,800 r/	11,400 r/	7,080 r/	3,390
June	7,080 r/	3,390 r/	30,400 r/	10,300 r/	30,300 r/	9,920 r/	7,180 r/	3,800
July	7,180	3,800	30,800	9,180	30,100	9,420	7,870	3,560
Jan.-July	XX	XX	213,000	75,300	211,000	78,800	XX	XX

p/ Preliminary. r/ Revised. XX Not applicable.

1/ ABMS reported data, plus additional reported and estimated data for smelters not reporting to ABMS.

2/ Excludes impure zinc oxide produced from other processes.

3/ Data are rounded to three significant digits; may not add to totals shown.

4/ In addition to stocks held at smelters, reported by ABMS, 893 tons of zinc was estimated to be held elsewhere in July 1996.

Sources: ABMS and U.S. Geological Survey.

TABLE 4
ESTIMATED DISTRIBUTION 1/ OF ZINC OXIDE SHIPMENTS BY INDUSTRY 2/ 3/

(Metric tons)

Industry	1995 p/			1996			
	July r/	Jan.-July r/	Jan.-Dec.	May r/	June r/	July	Jan.-July
Agriculture	W	W	W	W	W	W	W
Ceramics	265	1,800	3,390	607	522	567	3,670
Chemicals	2,060	17,500	30,000	2,550	2,050	1,970	17,100
Paints	377	2,790	4,790	395	354	329	2,870
Photocopying	W	W	W	W	W	W	W
Rubber	6,300	48,900	85,300	7,310	6,590	6,150	51,600
Other	413	3,880	8,900	494	407	396	3,550
Total	9,410	74,800	132,000	11,400	9,920	9,420	78,800

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."

1/ Distribution of U.S. producers only. Imports excluded because distribution by industry cannot be distinguished.

2/ May include in-house consumption.

3/ Data are rounded to three significant digits; may not add to totals shown.

TABLE 5
APPARENT CONSUMPTION OF SLAB ZINC ACCORDING TO INDUSTRY USE AND PRODUCT 1/

(Metric tons)

Industry and product	1995 p/			1996			
	July r/	Jan.-July r/	Jan.-Dec.	May	June r/	July	Jan.-July
Galvanizing:							
Sheet and strip	41,300	290,000	490,000	44,900 r/	38,200	39,800	278,000
Other	14,300	102,000	168,000	15,300 r/	12,300	12,900	90,100
Total	55,700	393,000	658,000	60,200 r/	50,500	52,700	368,000
Brass and bronze	12,400	102,000	165,000	15,200	12,200	12,800	89,400
Zinc-base alloy	16,900	160,000	250,000	18,900	16,500	14,700	119,000
Other uses 2/	12,500	97,000	166,000	14,600 r/	14,500	13,100	97,900
Total apparent consumption	97,600	751,000	1,240,000	109,000 r/	93,700	93,300	674,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes zinc used in making zinc dust, wet batteries, desilvering lead, powder, alloys, anodes, chemicals, castings, light metal alloys, zinc oxide, and miscellaneous uses not elsewhere specified.

TABLE 6
AVERAGE MONTHLY ZINC PRICES

Month	North American Special High Grade cents/lb.	LME cash		Sterling exchange rate dollars/£
		cents/lb.	£/M.T.	
1995:				
July	52.44	46.57	643.67	1.595160
August	51.23	46.01	647.45	1.566796
September	50.05	44.73	632.61	1.558970
October	49.68	44.41	620.52	1.577929
November	52.02	46.75	659.65	1.562476
December	50.87	46.18	660.89	1.540505
Year average	55.83	46.82	656.59	1.572016
1996:				
January	50.59	46.22	666.59	1.528771
February	50.69	46.98	674.37	1.535960
March	51.24	48.26	696.72	1.527062
April	50.61	47.42	689.57	1.516041
May	50.50	46.98	683.57	1.515236
June	49.57	45.75	654.20	1.541590
July	49.87	45.36	643.95	1.553005

Source: Platt's Metals Week.

TABLE 7
U.S. EXPORTS OF ZINC 1/

Material	1995		1996			
	Quantity (metric tons)	Value (thousands)	June		Jan.-June 2/	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Slab zinc	3,080	\$4,340	378	\$412	918	\$1,070
Ore and concentrate (zinc content)	424,000	201,000	3,920	2,170	26,400	13,000
Waste and scrap (zinc content)	55,900	36,100	4,250	2,940	26,900	17,000
Powders , flakes, and dust (zinc content)	8,840	15,800	627	1,070	5,880	11,300
Oxide (gross weight)	7,090	9,110	348	857	3,160	4,660
Chloride	1,690	1,250	135	89	595	474
Sulfate	4,210	2,260	306	190	2,660	1,500
Compounds, other	1,690	4,350	72	530	981	3,130

1/ Data are rounded to three significant digits.

2/ July data not available at time of publication.

Source: Bureau of the Census.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF ZINC 1/

Material	1995		1996			
	Quantity (metric tons)	Value (thousands)	June		Jan.-June 2/	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Slab zinc	856,000	\$903,000	57,200	\$61,100	388,000	\$414,000
Ore and concentrate (zinc content)	10,300	4,380	522	145	1,500	592
Waste and scrap (gross weight)	42,300	19,700	2,550	1,130	16,400	6,810
Powders, flakes, and dust (gross weight)	11,700	20,400	690	1,080	4,680	7,860
Oxide (gross weight)	49,100	54,200	4,310	4,380	29,300	29,600
Chloride	2,450	2,370	79	85	1,070	953
Sulfate	5,400	3,820	454	335	2,350	1,680
Compounds, other	1,850	2,490	141	167	726	711
Dross, ashes, and fume (zinc content)	10,900	8,260	988	672	7,450	5,260

1/ Data are rounded to three significant digits.

2/ July data not available at time of publication.

Source: Bureau of the Census.

TABLE 9
U.S. IMPORTS OF ZINC, BY TYPE OF MATERIAL AND COUNTRY 1/

(Metric tons)

Material and country	General imports			Imports for consumption		
	1995	1996		1995	1996	
		June	Jan.-June 2/		June	Jan.-June 2/
Ore and concentrate: (zinc content)						
Mexico	7,030	522	1,500	7,030	522	1,500
Peru	5,540	254	1,110	3,310	--	--
Other	463	--	151	15	--	--
Total	13,000	775	2,770	10,300	522	1,500
Blocks, pigs, or slab:						
Australia	15,400	--	6,970	18,200	--	7,350
Brazil	52,900	3,610	18,700	67,800	3,610	18,700
Canada	468,000	39,800	264,000	469,000	39,800	264,000
Finland	13,500	--	--	13,500	--	--
Mexico	99,200	10,500	49,700	99,200	10,500	49,700
Peru	21,500	1,320	14,800	21,500	1,320	14,800
Russia	12,800	64	2,670	12,800	64	2,670
Spain	109,000	5,020	25,600	98,000	--	24,600
Other	55,300	2,000	6,190	53,700	2,000	6,190
Total	848,000	62,300	389,000	856,000	57,200	388,000
Dross, ashes, & fume (content)	10,900	988	7,450	10,900	988	7,450
Grand total	872,000	64,000	399,000	877,000	58,800	397,000
Other (gross weight):						
Waste and scrap	42,300	2,550	16,400	42,300	2,550	16,400
Sheets	332	2,520	5,400	332	2,520	5,400
Dust, powder, flakes	11,700	690	4,680	11,700	690	4,680

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ July data not available at time of publication.

Source: Bureau of the Census.

TABLE 10
U.S. IMPORTS FOR CONSUMPTION OF ZINC OXIDE, BY COUNTRY 1/

(Metric tons)

Country	1995	1996	
		June	Jan.-June 2/
Canada	24,800	2160	13,900
China	3,040	30	2060
Mexico	16,600	1900	11,100
Other	4,640	223	2,300
Total	49,100	4310	29300

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ July data not available at time of publication.

Source: Bureau of the Census.